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Significance of Aristotle's Teaching Practice for Modern Education

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Abstract

The teaching experience of former systems of education is now enticing the attention not only of some specialists but also from practicing teachers of different levels, and their findings can be used by educators involved in the practical work at schools and universities. In this chapter, the significance of the Aristotle's approach to education is discussed. Four aspects of his approach are specifically investigated: (1) the integrity of knowledge, (2) wonder as the beginning of knowledge, (3) oral communication as a specific way of creating knowledge, and (4) knowledge as a necessary element of way of life. While nowadays, the individuality is the primary value, and the accessibility of information is becoming almost absolute, these points of the Aristotle's way of teaching are becoming crucial.

Keywords: Aristotle, integrity of knowledge, wonder, oral communication, knowledge as value, "theoretical way of life"

1. Introduction

Nowadays, the importance of ancient systems of education is attracting more attention. It is especially true in relation to the Greek's teaching experience, including the one of the Sophists, Stoics, and students of Plato's *Academy* and Aristotle's *Lykeion*. This interest is arousing from professional philosophers (see: [10, 14, 20]) as well as from the practicing teachers (see: [7, 15, 19]). The main idea of this chapter is to argue that nowadays the importance of the Aristotelian approach to teaching is becoming not only interesting but also quite useful. At the same time, some authors indicate that modern universities are becoming much closer to corporations rather than to the classical universities, and in this case previous experience cannot be really useful ([9], pp. 24-25). I think that it is not quite right, and the basic ideas of great teachers should serve as landmarks notwithstanding the modern trends in education and conditions of life.

The main idea of this chapter is to argue that nowadays the importance of the Aristotelian approach to teaching is becoming not only interesting but also quite useful.

The problems of modern education are largely related to the new conditions in which a person of the information society finds himself.

This is, firstly, the victory of the pedagogical concept, which places the interests of the individual above the interests of society and, accordingly, approves the need to choose individual trajectories of education. Yet, the person has to become a member of society and, therefore, to be an obedient taxpayer sharing norms and persuasions of a particular social milieu. These two goals of education are not

easily compatible; moreover, they are quite contradictory. This contradiction can be found in the saying by Alain Touraine, taken as the epigraph for the book [21]: “Democracy serves neither society nor individuals. Democracy serves human beings insofar as they are subjects, or in other words, their own creators and the creators of their individual and collective lives.” The problem here is that collective life is guaranteed by the state, and only law (also executed by the state) guarantees the possibility of individual life. At the same time, the law is implemented by the power of the state. This means that the state has to shape future citizens to be obedient, passive, and dependent. It is exactly what Chomsky says in his interview: “If kids are studying for a test, they’re not going to learn anything. We all know that from our own experience. You study for a test and pass it and you forget what the topic was, you know. And I presume that this is all pretty conscious. How conscious are they? I don’t know, but they’re reflections of the attitude that you have to have discipline, passivity, obedience, the kind of independence and creativity that we were shown in the ’60s and since then – it’s just dangerous” [8].

Secondly, teaching now occurs in conditions where information is always fully available. This means that information does not become real knowledge. It seems that bits of information appear out of nowhere. Accordingly, the very value of knowledge is undermined, because it appears to be so easily gained. This forms a second contradiction: we are living in an informational society, but information is losing its value.

2. Main part

Accordingly, the goals of education are dramatically changing. It is openly or implicitly proclaimed that the purpose of the system of education is, first, to educate a member of a well-organized society, whose purpose is to find the best suitable place in order to receive the maximum from outer conditions. In other words the system of education is aimed to coin qualified consumers, who will be able to navigate themselves through complicated conditions of modern society, or/and, secondly, education is aimed at training a narrow specialist who will be able to find the most appropriate and profitable job necessary for national economy. The system is built in such a way that a person eventually thinks that he chooses the purpose of his training and that he is the master, yet in reality he is driven by the system.

Yet here, the insurmountable and unproductive contradiction is formed between standardization (which is required for the training of a narrow specialist) and the implementation of the individual trajectory of education, which in name is designed to develop the inner abilities of the pupils. This contradiction is easy to demonstrate, for instance, by the so-called manifesto on the digital educational environment, which proclaims that “the purpose of education is not the assimilation of knowledge, but the development of personality” and that “...individualization is the highest good and point of reference” [17].¹ The basic statements are as follows: “Nowadays training is predominantly the obtaining of information from outside – given by a program, a teacher, or a standard. In the digital environment the unit of learning becomes the activity of the student” [17]. And further, “...the usual concept of ‘a textbook’ retains its meaning only as a selection of educational content of different types. It should be replaced by a digital educational environment, where everyone can choose their own educational path, consisting of activities that they need here and now. The environment, in turn, should continuously analyze the needs and abilities of the student and offer scenarios for further development” [17]. The authors do not even notice how

¹ This program is taken just as a demonstration of particular modern tendency in education.

ridiculous and contradictory this picture looks. On the one hand, it speaks about the formation of an individual educational trajectory, which should be based on the abilities and interests of the student. But, on the other hand, an environment acts as an *active builder* of this exclusively autonomous personality due to its responsibility to set the parameters of this individual trajectory. What about the will of the personality whose path is arranged from outside? In addition, we are talking about the activities relevant at the moment, but it is unclear how this will determine future activity and how the abilities of the growing and emerging individual will be taken into account. What about the establishment of a system that would take into account the change of this very environment as well? There is an extremely thin difference between (1) the situation when artificial intelligence systems are designed to tutor students for particular tasks, yet the very task is presented in the course of traditional education (see, e.g., [6]), and (2) the situation when these systems start to play an active role replacing a student's own sphere of initiative.

The goal of the creators of the so-called OLnet is similar, in that they state that "There has also been a noticeable move towards a strategic recognition of the mission critical importance of technologies as part of wider institutional structures. These changes are evidence that technologies have had an increasing impact on education processes over the last couple of decades, however the impact on actual practice – on teaching and learning – is perhaps not as radical as might have been expected. Considered in terms of methods of teaching, models of work and the relations between teacher and learner, the impact of technologies has not been as transformative in education as it has been in other industries such as finance, tourism or online shopping" ([11], p. 124). The very determination to transform the teaching process on the basis of new technologies excluding personal interaction in favor of impersonal procedure is quite indicative. The problem is that we cannot predict the outcome of the implementation of such innovations.

Further colors to this picture are added by the purely economic approach to education. This is perfectly demonstrated by the intermediate results of educational reforms which have been going in the Russian Federation for about a quarter of a century taking the averaged Western system of education as a model. The process of education is turned into a "service": pupils are becoming clients who are always right, and teachers are the sellers of educational products. This situation is drastically different in its goals and approaches from the situation before.

In the end, we can observe the following outcome. The person who has been educated for 11 years (I am taking the average first year student of university although there definitely are some capable students):

- cannot write summary of what he has heard during a lecture, because he (1) cannot discriminate between principle and secondary statement and (2) he cannot formulate the main idea of what he has just heard;
- demonstrates an absence of elementary knowledge of mathematics, physics, history, literature, etc;
- is able to recall bits of texts (without understanding them) at the level of short-time memory, yet long-time memory is not used;
- does not try to form an integral picture systematizing fragments of received knowledge. Instead of this holistic presentation of some subject or aspect of reality, he creates a senseless mosaic, which is only casually related to the discussed subject. This means that the very possibility to ask any questions about this subject is not imaginable, because the questioning presupposes clarification and refinement of the integrate picture. The very intention to clarify

disappears, replaced by simple procedure: any fragment of received knowledge is easily followed by the next one, and the link is not necessary;

- loses the idea of the value of knowledge;
- does not try to answer the questions which he formulated himself but is trained to seek information which is effortlessly available in one step using different databases;
- cannot critically evaluate straightforwardly received information;
- loses the feeling of incomprehension, which is unavoidable for the possibility to wonder, and, therefore, if information is not an answer to a question that a person consciously asked themselves, that person will not attempt to keep that information in long-term memory.

In this situation, it is interesting to look at the goals set by the education system in the era of Aristotle, given the phenomenon that is called the “Greek miracle” and which with extreme efficiency showed itself in a variety of areas of human activity, including the intellectual. Aristotle is also taken in this respect due to his activity as a teacher and founder of the school which greatly influenced the development of learning in Alexandria, the paramount center of science of the Hellenistic era.

Werner Yeager in his famous book *Paideia* stated that the Greeks thought that the main purpose of education was the creation of man. “They were the first to recognize that education means deliberately moulding human character in accordance with an ideal. ... Throughout history, whenever this conception reappears, it is always inherited from the Greeks; and it always reappears when man abandons the idea of training the young like animals to perform certain definite external duties, and recollects the true essence of education” ([22], pp. xxii-xxiii). This idea of the creation of man (in Russian the word for “education” is “образование” which exactly means “creation” and “building”) is developed by the Greeks in close relation with the idea of a necessary political aspect. “The man revealed in the work of the great Greeks is a political man. Greek education is not the sum of a number of private arts and skills intended to create a perfect independent personality. No one believed that it was, until the decline of Hellenism, when the Greek state as such had vanished – the age from which modern pedagogy is directly derived” ([22], pp. xxv-xxvi). Yeager emphasizes that in this case the education was intended to create a responsible citizen rather than an independent personality or narrow specialist.

Aristotle in his understanding of education followed Socrates and especially his teacher Plato and, accordingly, opposed philosophy to dialectics and sophistry. Socrates began to struggle with the sophists, as they realized a purely intellectual ideal, allowing their students to achieve their goals in the political arena without trying to be virtuous. Socrates, followed by Plato and Aristotle, effectively challenged this ideal. Immortal accomplishment of the sophists was the invention of intellectual culture and corresponding ways of educational techniques. “At the same time it is clear that whenever their political training attacked the deeper problems of morality and the state, it was in danger of teaching half-truths—unless it could be grounded in genuine and thorough political thought, searching for the truth for its own sake. From this point of view, Plato and Aristotle later attacked the whole system of sophistic culture and shook it to its foundations” ([22], p. 293). The starting point of the Socratic approach to education was the civilization of the individual in order to make him a socially valuable person. Xenophon spoke on this, introducing the idea of his teacher that if you take “the human beings with the best natures, who are most robust in their souls and most able to accomplish whatever they attempt, if they are educated and learn what they should do, become best and

most beneficial (for the good things they accomplish are very many and very great), while without education and learning they become worst and most harmful, for - not understanding how to decide what they should do - they frequently attempt wicked actions, and since they are grand and impetuous they are hard to restrain and hard to turn back, which is why the bad things they do are very many and very great" ([22], p. 112). In other words, we are talking about curbing wildlife, which characterizes an uneducated person. Thus, the purpose of education is undoubtedly proclaimed as the creation of a political person (a man of a *polis*), a citizen.

Plato follows Socrates directly; Aristotle follows Plato. If Socrates sets a pattern straightly by his personal example, Plato already implements this approach in the Academy, and his approach is intentionally opposed to the rhetorical schools of his time. Plato combines intelligence with the desire to implement a certain civil ideal. As John Dillon notes: "That is the true legacy of the Platonist model of education, on which modern civilization is progressively turning its back: that the properly structured study of quite abstract subjects is the best training for the mind, even when the mind is turned to the solution of entirely practical problems" ([12], p. 332). This aspect of Plato's approach was fully continued by Aristotle in his *Lykeion*. Without entering into discussion of more detailed intersections between systems of teaching of three great philosophers, I would like to emphasize the following points of Aristotelian approach to education, which I assume to be the most important nowadays.

These points are (1) integrity of knowledge, (2) wonder as the beginning of knowledge, (3) oral communication as a way of organizing knowledge, and (4) knowledge as a necessary and special element of lifestyle.

Let us start with the first point: integrity. How has it been revealed in the educational system of Aristotle?

(1) An indication toward integrity and commitment to **integrity** are present (a) in the mandatory establishment of generic relations, when any object of study is considered, and in establishing the system of the most general categories, and (b) in the methodological support of knowledge.

(a) We will consider these two aspects successively. According to Aristotle, philosophy and logic play a key role in education as the forms of implementation of a unified approach in any field of knowledge. It is philosophy that turns knowledge "scientific," that is, in the understanding of Aristotle, the knowledge which is built from the beginnings, from the first principles. "Clearly then it is the function of the philosopher, that is, the student of the whole of reality in its essential nature, to investigate also the principles of syllogistic reasoning. And it is proper for him who best understands each class of subject to be able to state the most certain principles of that subject; so that he who understands the modes of Being qua Being should be able to state the most certain principles of all things. Now this person is the philosopher, ..." ([1, 2], *Metaphysics*, 1005b). The first principles of everything are explored by theology, and, consequently, less general principles are examined by specific sciences. Thus, Aristotle transfers philosophical approach to any sphere of research, and any knowledge is built systematically. Hence, the methodical analysis is applied to everything under research. Namely, Aristotle is the one who sets the system of categories in his *Metaphysics*—essence, quality, place, action or suffering, relation, and quantity, and then he sets more extensive list of categories in the *Categories*. Aristotle states: "Clearly, then, it pertains to one science to study Being qua Being, and the attributes inherent in it qua Being; and the same science investigates, besides the concepts mentioned above, Priority and Posteriority, Genus and Species, Whole and Part, and all other such concepts" ([1, 2], *Metaphysics*, 1005a). Due to the emergence of categories—the specific concepts that cannot be defined by the principle of gender and species differences (because they are the most general of their kind)—it is possible to freely build a generic chain that has been impossible

before the emergence of philosophy. Plato, followed by Aristotle, rationalized the relationship between concepts. Aristotle built categories as a system.²

(b) The method developed by Aristotle provides a unified approach to the study of any phenomenon. For instance, he begins his *Physics* not with the concept of movement but from methodological instructions. The first chapter begins with the definition of true knowledge (*to epistasmai* - from *he episteme* - science): “When the objects of an inquiry, in any department, have principles, conditions, or elements, it is through acquaintance with these that knowledge, that is to say scientific knowledge, is attained. For we do not think that we know a thing until we are acquainted with its primary conditions or first principles, and have carried our analysis as far as its simplest elements. Plainly therefore in the science of Nature, as in other branches of study, our first task will be to try to determine what relates to its principles” ([3], *Physics*, 184a). This means that the researcher has to move from general to specific. Of course, speaking of physics, we assume that it is an inductive science, but if we attribute Aristotle’s approach not to obtaining knowledge, but to its representation, it turns out to be quite relevant here. We can do this because in teaching we are not just obtaining knowledge but have to present it to students.

In a similar way, Aristotle approaches judicial practice, which is very far from physics: “... Most important of all, because a judgment of a lawmaker is not about a particular case but about what lies in the future and in general, while the assemblyman and juror are actually judging present and specific cases ...” ([5], *Rhetoric*, 1354b). This approach allows to lay the foundation of theoretical jurisprudence.

Practical disciplines are built by the same logic. Thus, Aristotle begins his ethical teaching with the definition of the good as the goal of any art and, accordingly, shows how specific benefits, like health, victory, and wealth, are subjects to more general benefits. “Now, as there are many actions, arts, and sciences, their ends also are many; the end of the medical art is health, that of shipbuilding a vessel, that of strategy victory, that of economics wealth. But where such arts fall under a single capacity — as bridle-making and the other arts concerned with the equipment of horses fall under the art of riding, and this and every military action under strategy, in the same way other arts fall under yet others — in all of these the ends of the master arts are to be preferred to all the subordinate ends; for it is for the sake of the former that the latter are pursued” ([4], *Nicomachean Ethics*, 1094a). The number of examples can be easily multiplied. Obviously, Aristotle’s approach in all these cases is based upon the assumption that as the world is consistent in its entirety, the methodology should be commensurable to it.

(2) Now we turn to **wonder** (*to thaymadzein*) as the beginning of knowledge. Aristotle talks about wonder and the ability to be surprised in two famous places from *Metaphysics*. Let us start with the second one: “... All begin, as we have said, by wondering that things should be as they are, e.g. with regard to marionettes, or the solstices, or the incommensurability of the diagonal of a square; because it seems wonderful to everyone who has not yet perceived the cause that a thing should not be measurable by the smallest unit. But we must end with the contrary and (according to the proverb) the better view, as men do even in these cases when they understand them; for a geometrician would wonder at nothing so much as if the diagonal were to become measurable” ([1, 2], *Metaphysics* 983a). So what is wonder according to Aristotle?

² Émile Benveniste demonstrated that this system reflects the specific grammatical structure of the Ancient Greek; however in this case it does matter, because Aristotle started to apply these general concepts not in the sphere of linguistics but in the sphere of general knowledge.

First, it seems necessary to understand wonder as the reaction to a deviation from the norm, in the most extreme cases, to a deviation that goes beyond the possible. By providing the example with toys (marionettes), Aristotle has in mind a situation where this reaction can proceed in the interest and demand of research and response. Secondly, he is talking about the surprise of the researcher, who moves from the opposite: he starts from the idea that the diagonal is commensurate; however by exploring the case comes to the contrary—the diagonal is incommensurable. Aristotle, as we have seen, speaks of two types of wonder: (1) the surprise arising from the observation of something unusual and (2) surprise that contradicts to the theory, in this case—to geometry. The surprise of the possible commensurability of the diagonal of the square is the surprise of the geometer, a man who already knows the theory. And here we are talking only about the fact that by reasoning from the opposite (from something amazing), Aristotle becomes convinced of the correctness of the idea of incommensurability.

Yet neither the example of marionettes nor the example of incommensurability leads to the search for new knowledge. Let us now turn to the earlier passage: “It is through wonder that men now begin and originally began to philosophize; wondering in the first place at obvious perplexities, and then by gradual progression raising questions about the greater matters too, e.g. about the changes of the moon and of the sun, about the stars and about the origin of the universe. Now he who wonders and is perplexed feels that he is ignorant (thus the myth-lover is in a sense a philosopher, since myths are composed of wonders); therefore if it was to escape ignorance that men studied philosophy, it is obvious that they pursued science for the sake of knowledge, and not for any practical utility” ([1, 2], *Metaphysics*, 982a). Thus, for Aristotle wonder becomes the beginning not only of philosophy but also of any reflective intellectual activity, due to the fact that myths are represented in the works of poetry. Fran O’Rourke draws attention to this point in his work, saying that the philosopher, according to Aristotle, “relies greatly upon the poet, the ‘maker’ of myth, who, through allegory, symbol and metaphor, shapes a meaning from the welter of human happenings by weaving them into a pattern and narrative of wider cosmic order. Although Aristotle does not state that the poet is engaged in wonderment of the totality ... the juxtaposition and comparison of philosophy and poetry allow us to make this assumption” ([18], p. 31). O’Rourke emphasizes the point that, according to Aristotle, philosophy deals with totality (*pantos*), linking totality and wonder. Aristotle shows that from the beginning wonder leads to the creation of a myth. Myth replaces ignorance by stating the problem. Later philosophy starts to explore the problem in a systematic way.

Thus, according to Aristotle, wonder is necessary to indicate toward the situation of misunderstanding and incomprehension. Namely, this situation, in turn, generates interest, which, in relation to the most important things for a person, is presented in myths. Myths, in turn, raise questions, and they require systematic research of a philosopher or scientist.

It is interesting to note that Aristotle directly connects knowledge with leadership and, therefore, power. In *Rhetoric* he says: “And since to be the leader is pleasant, to seem to be wise in a practical way is a quality of leadership, and wisdom is a knowledge of many and admirable things” ([5], *Rhetoric*, 1371b). Aristotle understands that in society the power of myths is enormous, and, given this, the value of wonder is increasing even more.

In teaching, we can take these considerations in a slightly different way turning myths into hypotheses (taken as preliminary presuppositions) which are formulated to answer the question raised by wonder. I think that this substitution is not far from what Aristotle had in mind. Only the answer to a well-understood problem provides us with knowledge which will be stored in long-term memory.

(3) Let us now turn to the third point: the specifics of **oral communication** in comparison with the written. Here it is worth to pay attention to the nature of the organization of communication. Suffice to note that the guidance of Socrates was based precisely on his ability to influence the listeners by oral speech (e.g., it is possible to recall the speech of Alcibiades in Plato's *Symposium*). Namely, in this position of oral teacher, Socrates has become an enduring role model. Aristotle sets another type of oral communication, more consistent with his nature—teaching in the process of walking. Note that walking almost completely excludes direct recording. If we consider that the extant texts are mostly student records of Aristotle's lectures, it means that the students recorded them from memory, sometime after these lectures had been pronounced, that is, it is not a direct abstract but some later reproduction. It is worth, of course, to keep in mind that memory in a society where oral communication plays a decisive role, on average, was much more developed than memory of our contemporaries, when it is possible to find the right link, the right text in the book, or, even more effectively, at any time to turn to the help of a smartphone. It was necessary to keep a long chain of reasoning in mind. Thus, the retelling of some scenes in the dialogues of Plato may not have been fully written and was presented to a large extent as a record of spoken dialogues. A long narrative based on memory was normal practice. It is well-known that much attention was paid to the development of the memory by the Pythagoreans, and Plato and Aristotle went in line with this tradition.

In addition, for oral communication, it is very important to demonstrate the right intonation and clarity of speech. "There are three things which require special attention in regard to speech: first, the sources of proofs; secondly, style; and thirdly, the arrangement of the parts of the speech. We have already spoken of proofs and stated that they are three in number, what is their nature, and why there are only three; for in all cases persuasion is the result either of the judges themselves being affected in a certain manner, or because they consider the speakers to be of a certain character, or because something has been demonstrated. ... In the first place, following the natural order, we investigated that which first presented itself—what gives things themselves their persuasiveness; in the second place, their arrangement by style; and in the third place, delivery, which is of the greatest importance but has not yet been treated of by anyone. In fact, it only made its appearance late in tragedy and rhapsody, for at first the poets themselves acted their tragedies" ([5], Rhetoric, 1403b, 1404a]). The subtlety of the assessment spoken in Ancient Greece is known; it is sufficient to recall the case that the actor Gegeloh has been ridiculed in one of Aristophanes' comedies because he made a mistake in emphasis. In general, diction was a high priority. Such a reverent attitude to the spoken word raised its value much higher than in nowadays and, accordingly, drastically increased the impact on the listener.

Another important aspect of the primacy of oral communication is its dialogic nature, which is radically different from our primarily monologic reality. Involvement in the subject was being organized through dialogue, not through abstract acquaintance with it, especially with the usage of written text. Undoubtedly, students were able to ask questions and certainly greatly enjoyed this opportunity.³ The very nature of oral communication suggests that the listener much more actively delves into the matter here and now, and this requires (especially when discussing complex subjects) clarification or raising objections. Naturally, the very impression of the subject was associated with the situation of its perception—with the teacher's intonations, with his reactions to questions, and

³ As far as we know, this possibility was forbidden for so-called *akousmatikoi*; however this was the norm in communication of Pythagoras with *mathēmatikoi*.

with his manner of reasoning. All these aspects are lost when translating oral text into written. This was especially important in philosophy which embraced at that time a much wider range of subjects.

(4) Let us now turn to the last point—**knowledge as a necessary and special element of lifestyle**. The purpose of philosophizing was to build a way of life in accordance with certain principles. Aristotle formulated the difference between philosophy and other disciplines: "... Dialecticians and sophists wear the same appearance as the philosopher, for sophistry is Wisdom in appearance only, and dialecticians discuss all subjects, and Being is a subject common to them all; but clearly they discuss these concepts because they appertain to philosophy. For sophistry and dialectic are concerned with the same class of subjects as philosophy, but philosophy differs from the former in the nature of its capability and from the latter in its outlook on life. Dialectic treats as an exercise what philosophy tries to understand, and sophistry seems to be philosophy; but is not" ([1, 2], *Metaphysics*, 1004b)). It is also the continuation of the two-century tradition of wisdom.

Pierre Hadot paid attention to the idea of philosophy as a way of life, not just thinking as such. He writes: "These theories - which one could call 'general philosophy' - give rise, in almost all systems, to doctrines or criticisms of morality which, as it were, draw the consequences, both for individuals and for society, of the general principles of the system, and thus invite people to carry out a specific choice of life and adopt a certain mode of behavior." And Hadot continues: "... Philosophical discourse must be understood from the perspective of the way of life of which it is both the expression and the means. Consequently, philosophy is above all a way of life, but one which is intimately linked to philosophical discourse" ([16], pp. 2-4). Although Aristotle seems for modern readers to act as a philosopher, striving for pure knowledge, that is, knowledge that is valuable for its own sake, Hadot shows that this is not the case. Aristotle in his approach to teaching differs significantly from Plato. If the Academy prepared people for political life, *Lykeion* prepared for the life of a philosopher. Obviously, for Aristotle, philosophy is "a theoretical" way of life. "In modern parlance, 'the theoretic' is opposed to 'the practical' the way the abstract and speculative is opposed to the concrete. From this perspective, then, we may oppose a purely theoretic philosophical discourse to a practical, lived philosophical life. Aristotle himself, however, uses only the word 'theoretical' [*theoretikos*], and he uses it to designate, on the one hand, the mode of knowledge whose goal is knowledge for knowledge's sake, and not some goal outside itself; and on the other, the way of life which consists in devoting one's life to this mode of knowledge. In this latter meaning, 'theoretical' is not opposed to 'practical.' In other words, 'theoretical' can be applied to a philosophy which is practiced, lived, and active, and which brings happiness" ([11], pp. 80-81). Since philosophy is a certain way of life, it definitely carries an ethical principle: "... 'theoretical' philosophy is at the same time a certain ethics. Just as virtuous practice is not to choose for itself a purpose other than virtue, to strive to be a good man, not counting on any private benefit—'Just as virtuous praxis consists in choosing no other goal than virtue and in wanting to be a good person without seeking any particular interest, so theoretical praxis (it is Aristotle himself who inspires us to hazard this apparently paradoxical phrase) consists in choosing no goal other than knowledge. It means wanting knowledge for its own sake, without pursuing any other particular, egoistic interest which would be alien to knowledge. This is an ethics of disinterestedness and of objectivity" ([16], p. 81). Hadot notes that Aristotle is well aware that such a lifestyle requires that the material side of life is ensured. Economic side of life plays a significant role; however this does not occlude the intellectual striving.

Aristotle speaks of economics as of the basis for the transition to public activity, to the activity of the citizen, which is the nature of a real human being. According

to Aristotle, through ethics and law, a person defines himself within the political community (*koinonia*). “Since the main mechanism of self-identification is the correlation, feeling and self-realization within the political community, the main definition of the Greek is his civil belonging to a certain city-state. The state is the highest, and the most perfect form of political communication of equal people (*homilia*)” ([13], pp. 189–190). Political communication is possible only due to speech. Namely, speech makes it possible, and we come to the point of intersection of oral communication (speech) and lifestyle. The speech itself, according to Aristotle, contains an ethical principle. He begins his *Politics* with the statement that the most important and embracing all other types of communication is political communication, that is, communication within the state. However, communication is based on speech: “... Man alone of the animals possesses speech. The mere voice, it is true, can indicate pain and pleasure, and therefore is possessed by the other animals as well ... , but speech is designed to indicate the advantageous and the harmful, and therefore also the right and the wrong; for it is the special property of man in distinction from the other animals that he alone has perception of good and bad and right and wrong and the other moral qualities, and it is partnership in these things that makes a household and a city-state” ([1, 2], *Politics*, 1253a). It is obvious that a person can become a true human being only due to the fact that he is included in this system of social relations, civil relations, in particular.

In other words, we come to the problem of self-identification, where education plays a key role. Returning to the current situation in education, it is necessary to raise the question: is it possible to provide a sustainable self-identification if the individual trajectory of education is realized in full capacity? On the one hand, it is obvious that the individual trajectory of education is inevitable, because everyone learns the same things in different ways. All people are taught by the same samples of writing, but for apparent reasons everyone’s handwriting is different. On the other hand, it is understandable that people need a common knowledge platform to have a meaningful communication. If we exaggerate the idea of the initial choice of individual trajectories, communication will be reduced to a relatively small number of everyday topics, such as weather and the latest news. People who are taught this way are very easily manipulated. Otherwise, their way of life can be easily set and controlled from the outside. If this is stated as the aim of education, we have to forget the experience of the great ancient thinkers. It is quite useful to recall the role played by Aristotle’s pupils in foundation of the greatest scientific institution of antiquity—Alexandrian *Museion* and the library.

3. Conclusion

What follows from the reflection upon Aristotle’s approach to teaching in comparison with the current trends in education? Why is it relevant?

1. The significance of Aristotle, compared to the recent situation in education, starts with the counter-mosaic approach to teaching. The teacher has to strive toward systematic knowledge, which is possible only through the formation of a broad view of the subject based on the links with other subjects, creating at the end a hierarchical structure from first principles to the particulars. This underscores the importance of integral courses, including humanitarian ones.
2. The wonder that precedes the answer to the problem makes this answer and the relevant knowledge involved valuable and thus becomes part of long-term rather than short-term memory. The so-called problem approach is a kind

of attempt to implement what Aristotle means, but it should be included in a broader context of questioning. It is possible to teach students to wonder; however this is not the same as putting them in a problematic situation. The latter is something artificial and secondary: the ability to wonder means the ability to intellectually create the problematic situation. It is part of life rather than part of the educational process. Yet only the ability to be surprised leads to the ability to raise questions, and after that the problem is formulated. It requires an appropriate mindset.

3. Oral communication about complex matters teaches concentration, the ability to highlight main points, to keep the thread of the narrative. It forces students to ask questions, turning a monologue of the teacher into a dialogue between teacher and student. Modern pedagogical practices are moving along the path of increasing the role of visualization, while philosophical courses should be based primarily on oral communication. Also, in teaching other disciplines, more attention should be paid to oral communication and dialogue as a form of resolving the problem situation.
4. Understanding that any knowledge is ethical in nature by itself makes the teaching more responsible. Striving for the truth and awareness of the power of acquired knowledge should accompany teaching from the very beginning. If these conditions are obeyed, education is aimed not toward the formation of a narrow specialist but toward the creation of a responsible citizen, who is much more an individual than a modern seeker of an individual educational trajectory.

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References

- [1] Tredennick H. Aristotle Metaphysics. Vol. 17. Cambridge, MA: Harvard University Press; 1933. Available from: <http://www.perseus.tufts.edu> [Accessed: Dec 12, 2018]
- [2] Tredennick H. Aristotle in 23 Volumes. Vol. 18. London: William Heinemann Ltd.; 1989. Available from: <http://www.perseus.tufts.edu> [Accessed: Dec 12, 2018]
- [3] Hardie RP, Gaye RK. Physics by Aristotle. Available from: <http://classics.mit.edu/Aristotle/physics.1.i.html> [Accessed: Dec 12, 2018]
- [4] Ross D. Aristotle. The Nicomachean Ethics. NY: Oxford University Press; 2009
- [5] Kennedy GA. Aristotle on Rhetoric. 2nd ed. Oxford University Press; 2007
- [6] Hoppe U, Verdejo F, Kay J, editors. Artificial Intelligence in Education Shaping the Future of Learning through Intelligent Technologies. Amsterdam: IOS Press; 2003
- [7] Michael B. Stoicism & Teaching: Part One. Available from: <https://modernstoicism.com/stoicism-teaching-part-one/> [Accessed: Jan 2, 2019]
- [8] Chomsky N. Democracy and Education in the 21st Century and Beyond: An Interview With Noam Chomsky. Available from: <https://truthout.org/articles/democracy-and-education-in-the-21st-century-and-beyond-an-interview-with-noam-chomsky/> [Accessed: Dec 1, 2018]
- [9] Stefan C. What Are Universities For? Penguin Books; 2012
- [10] Gagarin M. Antiphon the Athenian: Oratory, Law, and Justice in the Age of the Sophists. Austin: University of Texas Press; 2002
- [11] Conole G, McAndrew P. OLnet: A new approach to supporting the design and use of open educational resources of open educational resources of open educational resources. In: Looking Toward the Future of Technology-Enhanced Education: Ubiquitous Learning and the Digital Native. Hershey, New York: Information Science Reference (an imprint of IGI Global); 2010
- [12] Dillon J. Paideia Platonikê: Does the later Platonist programme of education retain any validity today? SCHOLE. Filosofskoe antikovedenie i klassicheskaya traditsiya (Philosophical Classics and Classical Tradition). 2017;**11**(2)
- [13] Yu D. Lichnost' i kommunikatsiya. Antropologiya ustnogo i pis'mennogo slova v antichnoi kul'ture. (Personality and Communication. Anthropology of Oral and Written Word in Ancient Culture). Sankt Petersburg: RHGA Publishing House; 2015. (In Russian)
- [14] González PB. Plato's Idea of the Teacher. Available from: <https://kirkcenter.org/essays/platos-idea-of-the-teacher/> [Accessed: Jan 2, 2019]
- [15] Hadot P. Philosophy as a Way of Life. Spiritual Exercises from Socrates to Foucault. Oxford: Blackwell Publishers Ltd; 1995
- [16] Hadot P. What is ancient philosophy? Harvard University Press Chase M (transl). paperback edition; 2004
- [17] Manifest o tsifrovoi obrazovatel'noi srede (Manifesto on the digital educational environment). Available from: <https://mel.fm/obrazovaniye/9541708-edutainme> [Accessed: Dec 12, 2018] (In Russian)
- [18] o'Rourke F. Aristotelian Interpretations. Irish Academic Press; 2016

[19] Shim SH. A philosophical investigation of the role of teachers: A synthesis of Plato, Confucius, Buber, and Freire. *Teaching and Teacher Education*. 2008;**24**:515-535

[20] Volf M. The sophistic education. *SCHOLE: Ancient Philosophy and the Classical Tradition*. 2018;**12**(1):287-296 (in Russian)

[21] Woods Philip A. *Transforming Education Policy. Shaping a Democratic Future*. Bristol: The Policy Press; 2011

[22] Werner Y. *Paideia: The Ideals of Greek Culture*. In: *Archaic Greece: The Mind of Athens*. Vol. 1. Oxford: Basil Blackwell; 1946